

RIVER STAGES AND FLOODS

By C. R. JORDAN

DRY weather persisted over most of the country during January, precipitation being below normal except for a few central States from Texas northward through South Dakota. It was extremely dry in these States until near the close of the month when heavy precipitation fell in the Great Plains area. This single storm brought the monthly totals to more than twice the normal in South Dakota, which had the second greatest January amount of record, and Nebraska the greatest of record. The eastern boundary of the heavy precipitation was sharply delineated as shown by the contrast between Kansas with 158 percent of normal and the adjoining state of Missouri with only 25 percent of normal. It was the second driest January in 107 years at St. Louis. Extremely dry weather continued in the Ohio Valley States. Ohio and Indiana had the driest January of record, and Illinois the driest since 1931.

The snow cover was reduced over most sections east of the Rocky Mountains during January, due to the influence of mild weather and the lack of any substantial new snows. Practically the only gains were in the Rocky Mountains and in the northern and extreme western portions of the Great Plains. There were about two feet of snow in extreme northwestern Maine, 40 inches at Lake Placid in the Adirondacks of New York, and only from 1 to 2 inches in the mountains of western Pennsylvania at the close of the month. A few stations in northern Michigan and Minnesota reported a foot of snow but even in these areas there was much bare ground. Some amounts in the West were 58 inches at Cumbres, Colo.; 50 inches at Silver Lake, Utah; 84 inches at Paradise Inn., Wash.; and 48 inches at Soda Springs, Calif. The snow cover is generally below normal.

Stream flow during January was below normal in most of the country and ground-water storage generally decreased. An outstanding example of the effect of the continued dry weather on ground-water levels, as shown by surveys of the U. S. Geological Survey, is the ground-water level in the Santa Cruz valley area of Arizona—which, at the end of January, was 6.54 feet lower than at the end of January 1942, and 10.34 feet lower than at the same time in 1941. As might be expected, there was little flooding during the month.

Atlantic Slope drainage.—Light flooding occurred at widely scattered points along the South Atlantic Coast.

Moderately heavy rains falling on already saturated soil, about the middle of the month, caused moderate overflows in the Neuse, Haw, and Cape Fear Rivers. No damage was reported. The same storm produced a rapid rise in the Pee Dee River which rose slightly above flood stage at Mars Bluff Bridge, S. C., on the 20th. The only loss reported was that caused by the suspension of business, which is estimated at \$500. The Broad River just reached flood stage at Blairs, S. C., on January 4, but no damage occurred. Light flooding occurred along the lower Savannah River at the beginning of the month and again near the middle of the month. Damage was small. The greatest loss, estimated at \$250, was due to the suspension of business and the cost of moving lumber to high land.

East Gulf of Mexico drainage.—The Pearl River just reached flood stage at Pearl River, La., on January 20th. No damage occurred.

West Gulf of Mexico drainage.—Light flooding occurred soon after the middle of January in the Sabine and Trinity Rivers and the Bayou Nezpique. The only losses reported were in the Trinity River Basin where livestock and other movable property suffered a loss of about \$1,000 and intangible losses were estimated at \$1,500.

FLOOD-STAGE REPORT FOR JANUARY 1944

[All dates in January]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
Neuse:	<i>Feet</i>			<i>Feet</i>	
Smithfield, N. C.	13	{ 4	5	13.5	5
Goldsboro, N. C.	14	16	19	16.0	17
Kinston, N. C.	14	19	23	15.7	22
Haw: Moncure, N. C.	20	24	25	14.1	24
Cape Fear: Elizabethtown, N. C.	20	16	16	20.0	16
Pee Dee: Mars Bluff Bridge, S. C.	20	{ 5	6	23.2	5
Broad: Blairs, S. C.	17	16	20	27.0	18
Savannah: Clyo, Ga.	14	19	20	17.2	20
	11	{ 4	4	15.0	4
		9	7	11.2	5
			(1)	12.4	15
EAST GULF OF MEXICO DRAINAGE					
Pearl: Pearl River, La.	12	20	20	12.0	20
WEST GULF OF MEXICO DRAINAGE					
Bayou Nezpique: Basile, La.	18	1	23	21.8	17-18
Sabine: Logansport, La.	25	18	22	25.8	20
Trinity: Liberty, Tex.	24	16	20	25.2	17

1 No record after 21st.